

SAMPLING METHOD FOR USE WITH BURSTY COMMUNICATION CHANNELS

ABSTRACT

An error correction method wherein an incoming data stream is divided into symbols. The divided data stream is sampled in threads, with samples taken at fixed time intervals. The fixed time intervals are slightly longer than the time interval of the bursts of data. A correction symbol is thus mixed with symbols of the divided data stream that have a fixed time separation. This generates an error corrected data stream. In a second embodiment, the same correction symbol is inserted in more than one thread. The threads are selected so that they partially overlap. Thus, a noise burst on the channel that overwhelms one of the threads will be within the limits of another one of the threads. The symbols that overlap may be determined using the overlapping symbols of the threads that are not overwhelmed, thus allowing the remainder of the non-overlapped threads to be determined.